

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: markspencer

Timestamp: [year=2009; month=10; day=16; hr=14; min=53; sec=45; ms=683;
]

=====

Application No: 10562627 Version No: 4.0

Input Set:

Output Set:

Started: 2009-09-30 14:37:46.585
Finished: 2009-09-30 14:37:48.136
Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 551 ms
Total Warnings: 13
Total Errors: 0
No. of SeqIDs Defined: 13
Actual SeqID Count: 13

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)

<110> CHOE, Mu-Hyeon
CHOI, Seong-Hyeok
LEE, Yong-Chan
KWON, Hye-Won
WON, Jae-Seon
YU, Mi-Hyun
SONG, Jeong-Hwa
KIM, Yong-Jae

<120> The Dimer of Chimeric Recombinant Binding
Domain-Functional Group Fusion formed via
Disulfide-bond-bridge and The Process
For Producing The Same

<130> 428.1060

<140> 10562627
<141> 2005-12-22

<150> PCT/KR2004/001595
<151> 2004-06-30

<150> KR2003-0043599
<151> 2003-06-30

<160> 13

<170> KopatentIn 1.71

<210> 1
<211> 1749
<212> DNA
<213> Artificial Sequence
<220>
<223> pMC74 plasmid coding sequence

<400> 1
atggatgtga agctggtgga atctggagga ggcttagtgc agcctggagg gtccctgaaa 60
ctctcctgtg caacacctgg attcactttc agtgactatt acatgtattt ggttcgccag 120
actccagaga agaggctgga gtgggtcgca tacattagta atgatgatag ttccggccgt 180
tattcagaca ctgtaaaggg ccggttcacc atctccagag acaatgccag gaacaccctc 240
tacctgcaaa tgagccgtct gaagtctgag gacacagcca tatattcctg tgcaagagga 300
ctggcctggg gagcctgggt tgcttactgg ggccaaggga ctctggcac tgtctctgca 360
gccaaaacga cacccccatc tgtctatcca ctggccctg gatctgctgc ccaaactaac 420
tccatggtga ccctggatg cctggtaag ggctattcc ctgagccagt gacagtgacc 480
tggaaactctg gatccctgtc cagcggtgtg cacacccatc cagctgtcct gcagtcgtac 540
ctctacactc tgagcagctc agtgactgtc ccctccagca cctggcccaag cgagaccgtc 600

acctgcaacg	ttgcccaccc	ggccagcagc	accaaggtag	acaagaaaat	tgtccccagg	660
gatttgttta	gtaaggcttag	cataagtaca	aaagctccg	gaggtcccga	ggcgccgcagc	720
ctggccgcgc	tgaccgcgca	ccaggcttgc	cacctgccgc	tggagacttt	caccgtcat	780
cgccagccgc	gcggctggga	acaactggag	cagtgcggct	atccggtgca	gcggctggtc	840
gccctctacc	tggcggcgcg	gctgtcgtgg	aaccaggtcg	accaggtgat	ccgcaacgcc	900
ctggccagcc	ccggcagcgg	cggcgacctg	ggcgaagcga	tccgcgagca	gccggagcag	960
gcccgtctgg	ccctgaccct	ggccgcgcgc	gagagcggc	gcttcgtccg	gcagggcacc	1020
ggcaacgacg	aggccggcgc	ggccaacggc	ccggcggaca	gcggcgacgc	cctgctggag	1080
cgcaactatc	ccactggcgc	ggagttctc	ggcgacggcg	gcgacgtcag	cttcagcacc	1140
cgcggcacgc	agaactggac	ggtggagcgg	ctgctccagg	cgcaccgcca	actggaggag	1200
cgcggctatg	tgttcgtcgg	ctaccacggc	acttcctcg	aagcggcgca	aagcatcgtc	1260
ttcggcgggg	tgcgcgcg	cagccaggac	ctcgacgcga	tctggcgcg	tttctatatc	1320
gccggcgatc	cggcgctggc	ctacggctac	gcccaggacc	aggaacccga	cgcacgcggc	1380
cggatccgca	acggtgccct	gctgcgggtc	tatgtccgc	gctcgagcct	gccgggcttc	1440
tacccgacca	gcctgaccct	ggccgcgcgg	gaggcggcgg	gcgaggtcga	acggctgatc	1500
ggccatccgc	tgccgctgcg	cctggacgcc	atcaccggcc	ccgaggagga	aggcgggcgc	1560
ctggagacca	ttctcggtcg	gccgctggcc	gagcgacccg	tggtgattcc	ctcgccgatc	1620
cccaccgacc	cgcgcaacgt	cggcgccgac	ctcgaccgt	ccagcatccc	cgacaaggaa	1680
caggcgatca	gcgcctgccc	ggactacgcc	agccagcccg	gcaaaccgcc	gcgcgaggac	1740
ctgaagtaa						1749

<210> 2
<211> 1764
<212> DNA
<213> Artificial Sequence
<220>
<223> pMH21 plasmid coding sequence

<400>	2	atggaggtga	agctgggtgga	atctggagga	ggcttagtgc	agcctggagg	gtccctgaaa	60
		ctctcctgtg	caacctctgg	attcactttc	agtgactatt	acatgtattt	ggttcgcgcag	120
		actccagaga	agaggctgga	gtgggtcgca	tacattagta	atgatgatag	ttccgcgcgt	180
		tattcagaca	ctgtaaaggg	ccgggttcacc	atctccagag	acaatgccag	gaacaccctc	240

tacctgcaaa tgagccgtct gaagtcttag gacacagcca tatattcctg tgcaagagga 300
 ctggcctggg gagcctgggt tgcttactgg ggccaaggga ctctggcac tgcgtctgca 360
 gccaaaacga caccatc tgtctatcca ctggccctg gatctgctgc ccaaactaac 420
 tccatggta ccctggatg cctggtcaag ggctatttc ctgagccagt gacagtgacc 480
 tggaaactctg gatccctgtc cagcggtgtg cacacccctc cagctgtcct gcagtctgac 540
 ctctacactc tgagcagctc agtgactgtc ccctccagca cctggcccag cgagaccgtc 600
 acctgcaacg ttgccaccc ggccagcagc accaaggtgg acaagaaaaat tgtgcccagg 660
 gattgtggta gtaaggcttg cataagtaca aaagcttctg gtggtggcgg atctggaggt 720
 cccgagggcg gcagcctggc cgcgctgacc ggcgcaccagg cttgccacct gccgctggag 780
 actttcaccc gtcatcgcca gccgcgcggc tggaaacaac tggagcagtg cggttatccg 840
 gtgcagcggc tggtcgcct ctacctggcg ggcggctgt cgtggAACCA ggtcgaccag 900
 gtgatccgca acgcctggc cagccccggc agcggcggcg acctggcga agcgatccgc 960
 gagcagccgg agcaggcccg tctggccctg accctggccg ccgcccagag cgagcgcttc 1020
 gtccggcagg gcacccggcaa cgacgaggcc ggcgcggcca acggcccgcc ggacagcggc 1080
 gacgcctgc tggagcgc当地 ctatcccact ggcgcggagt tcctcgccga cggcggcgc当地 1140
 gtcagcttca gcacccggc当地 cacgcagaac tggacggtgg agcggctgtc ccaggcgc当地 1200
 cgccaaactgg aggagcgc当地 ctatgtttc gtggcttacc acggcacctt cctcgaaagcg 1260
 gcgcaaagca tcgtttcg当地 cgggggtgc当地 ggcgcagcc aggacctcga cgcgatctgg 1320
 cgcggtttct atatcgccgg cgatccggcg ctggcctacg gctacgccc当地 ggaccaggaa 1380
 cccgacgc当地 acggccggat cgc当地 acggc当地 ggc当地 ggc当地 ggc当地 1440
 agcctggccgg gcttctaccg caccagcctg accctggccg cgc当地 ggccggaggc ggc当地 ggccgag 1500
 gtc当地 acggc当地 tgc当地 cggcc当地 tccgctggccg ctgc当地 cttgg当地 acgccatc当地 cggccccc当地 1560
 gaggaaggcg ggc当地 gctggcc当地 gaccattctc ggctggccg当地 tggccgagcg caccgtgg当地 1620
 attccctcg当地 cgatccccac cgacccgc当地 aacgtcgccg ggc当地 acggc当地 cccgtccagc 1680
 atccccgaca aggaacaggc gatcagcgcc ctgccc当地 gact acgccc当地 agccca gccc当地 ggccaaa 1740
 cgc当地 cgc当地 aggacctgaa gtaa 1764

<210> 3
<211> 1749
<212> DNA

<213> Artificial Sequence
<220>
<223> pCE2 plasmid coding sequence

<400> 3
atggatgtga agctgggtgga atctggagga ggcttagtgc agcctggagg gtccctgaaa 60
ctctcctgtg caacacctgg attcaacttc agtgactatt acatgtattt ggttcgccag 120
actccagaga agaggctgga gtgggtcgca tacattagta atgatgata gttccggcgt 180
tattcagaca ctgtaaaggc ccgggttacc atctccagag acaatgccag gaacaccctc 240
tacctgcaaa tgagccgtct gaagtctgag gacacagcca tatattcctg tgcaagagga 300
ctggcctggg gagcctgggt tgcttactgg ggccaaggga ctctggcac tgcgtctgca 360
gccaaaacga cacccccatttgtctatcca ctggccctg gatctgtgc ccaaactaac 420
tccatggtga ccctgggatg cctggtcaag ggctatttcc ctgagccagt gacagtgacc 480
tggaaactctg gatccctgtc cagcgggtgtg cacacccattcc cagctgtccct gcagtctgac 540
ctctacactc tgagcagctc agtgactgtc ccctccagca cctggccctg cgagaccgtc 600
acctgcaacg ttgcccaccc ggccagcagc accaagggtgg acaagaaaaat tgcgtccagg 660
gattgtggta gtaaggcttg cataagtaca aaagcttccg gaggtcccga gggcggcagc 720
ctggccgcgc tgaccgcgca ccaggcttgc cacctggcgc tggagacttt caccgtcat 780
cgccagccgc gcggctggga acaactggag cagtgccgcgatccgggtgca gcggctggtc 840
gccctctacc tggcggcgcg gctgtcgtgg aaccaggtcg accaggttatccgc 900
ctggccagcc ccggcagcgg cggcgcacccg ggcgaagcga tccgcgagca gccggagcag 960
gcccgtctgg ccctgaccct ggccgcgcgagc gcttcgtccg gcagggcacc 1020
ggcaacgcgc aggccggcgc ggccaaacggc ccggcggaca gcggcgcacgc cctgtggag 1080
cgcaactatc ccactggcgc ggagttccctc ggcgcacggcg ggcgcgtcag ctgcgtccacc 1140
cgccggcgcgc agaactggac ggtggagcgg ctgcgtccagg cgcacccgca actggaggag 1200
cgccggctatg tggtcgtcggtt accacacggc accttcctcg aagcggcgca aagcatcgatc 1260
ttcggcgggg tgcgcgcgcg cagccaggac ctgcgcgcgatccgc tctggcgcgg tttctatatc 1320
ggccggcgcgc cggcgcgtggc ctacggctac gcccaggacc aggaaccggc cgcacccggc 1380
cgatccgcacca acgggtccct gctgcgggtc tatgtgcgcg gctcgagcct gcccgggttc 1440
tacccgcacca gcctgaccct ggccgcgcgg gaggcggcgg gcgaggtcgac acggctgatc 1500
ggccatccgc tgccgcgtcg cctggacgccc atcaccggcc ccgaggagga aggcggggcgc 1560

ctggagacca ttctcggtcg gccgctggcc gagcgcaccc tgggtgattcc ctcgccgatc 1620
cccacccgacc cgcgcaacgt cggcgccgac ctgcgaccgt ccagcatccc cgacaaggaa 1680
caggcgatca gcgcctgcc ggactacgccc agccagcccc gcaaaccgcc gcgcgaggac 1740
ctgaagtaa 1749

<210> 4
<211> 672
<212> DNA
<213> Artificial Sequence
<220>
<223> pMC75 plasmid coding sequence

<400> 4
atggatgtgc ttagtgcacca gtctccattt agtttacctg tcagtcttgg agatcaagcc 60
tccatctttt gcagatctag tcagatcattt gtacatagta atggaaacac ctatttagaa 120
tggtaacctgc agaaaaccagg ccagtctcca aagctcctga tctacaaaagt ttccaaaccga 180
ttttctgggg tcccagacag gttcagtggc agtggatcag ggacagattt cacactcaag 240
atcagcagag tggaggctga ggatctggga gtttattact gcttcaagg ttcacatgtt 300
ccattcacgt tcggctcggg gacaaaaggttt gaaataaaac gggctgatgc tgccaccaact 360
gtatccatct tcccaccatc cagtggacag ttaacatctg gaggtgcctc agtcgtgtgc 420
ttcttgaaca acttctaccc caaagacatc aatgtcaagt ggaagattga tggcagtgaa 480
cgacaaaatg gcgtcctgaa cagttggact gatcaggaca gcaaagacag cacctacagc 540
atgaggcagca ccctcacgtt gaccaaggac gagtatgaac gacataacag ctatacctgt 600
gaggccactc acaagacatc aacttcaccc attgtcaaga gcttcaacag gaatgagtgt 660
ggtaaagctt aa 672

<210> 5
<211> 2454
<212> DNA
<213> Artificial Sequence
<220>
<223> pLSC52 plasmid coding sequence

<400> 5
atggatgtga agctgggtgga atctggagga ggcttagtgc agcctggagg gtccctgaaa 60
ctctcctgtg caacctctgg attcactttc agtgactatt acatgtattt ggttcggccag 120
actccagaga agaggctgga gtgggtcgca tacattagta atgatgatag ttccggccgt 180
tattcagaca ctgtaaaggg ccgggttcacc atctccagag acaatgccag gaacaccctc 240

tacctgcaaa tgagccgtct gaagtctgag gacacagcca tatattcctg tgcaagagga 300
ctggcctggg gagcctggtt tgcttactgg ggccaaggga ctctggcac tgcgtctgca 360
gccaaaaacga cacccccatac tgtctatcca ctggccctg gatctgctgc ccaaactaac 420
tccatggta ccctgggatg cctggtcaag ggctatttc ctgagccagt gacagtgacc 480
tggaaactctg gatccctgtc cagcggtgtg cacacccctcc cagctgtcct gcagtctgac 540
ctctacactc tgagcagctc agtgactgtc ccctccagca cctggccag cgagaccgtc 600
acctgcaacg ttgcccaccc ggccagcagc accaaggtgg acaagaaaaat tgtgcccagg 660
gattgtggtg agcccaaatac ttgtgacaaa actcacacat gcccaccgtg cccagcacct 720
gaactctgg ggggaccgtc agtcttccctt tccccccaa aacccaagga caccctcatg 780
atctcccgga cccctgaggt cacatgcgtg gtggtggacg tgagccacga agaccctgag 840
gtcaagttca actggtaacgt ggacggcgtg gaggtgcata atgccaagac aaagcccg 900
gaggagcagt acaacagcac gtaccgtgtg gttagcgtcc tcaccgtcct gcaccaggac 960
tggctgaatg gcaaggagta caagtgcac agtctccaaca aagccctccc agcccccatac 1020
gagaaaaacca tctccaaagc caaaggcag ccccgagaac cacaggtgtc caccctgccc 1080
ccatcccggt atgagctgac caagaaccag gttagcctga cctgcctggt caaaggcttc 1140
tatcccagcg acatcgccgt ggagtggag agcaatggc agccggagaa caactacaag 1200
accacgcctc ccgtgctgga ctccgacggc tccttcttcc tctacagcaa gtcaccgtg 1260
gacaagagca ggtggcagca gggaaacgtc ttctcatgtc ccgtgatgca tgaggctcg 1320
cacaaccact acacgcagaa gaggctctcc ctgtctccgg gtaaaggcgg aggcggatcc 1380
ggtgtggcg gttctaaagc ttccggaggt cccgagggcg gcagcctggc cgcgctgacc 1440
gcgcaccagg cttgccacct gcccgtggag actttcaccc gtcacgcgca gcccggcggc 1500
tggaaacaac tggagcagtg cggctatccg gtgcagcggc tggtcgcctt ctacctggcg 1560
gcgcggctgt cgtggAACCA ggtcgaccag gtgatccgca acgcccggc cagccccggc 1620
agcggcggcg acctggcgca agcgatccgc gaggcggcgg agcaggcccg tctggccctg 1680
accctggccg ccgcccggagag cgagcgcttc gtccggcagg gcacccggcaa cgacgaggcc 1740
ggcgccggcca acggccggc ggacagcggc gacgcccgtc tggagcgcac ctatcccact 1800
ggcgccggagt tcctggcgca cggcggcgac gttagctca gcacccggc cagcagaac 1860
tggacgggtgg agcggctgct ccaggcgcac cgccaaactgg aggagcgcgg ctatgtgttc 1920

gtcggtttttt acggcacctt cctcgaagcg ggcggaaatcg tcgttttcgg cgggggtgcgc	1980
gccccccggcc agggacacctcg cgcgatctgg cgcggtttct atatcgccgg cgatccggcg	2040
ctggcctacg gctacgcccc ggaccaggaa cccgacgcac gggccggat ccgcaacggt	2100
gccctgtgc gggcttatgt gcccgctcg agcctgcgg gtttctacgg caccagcctg	2160
accctggccg cgccggaggc ggcggggcgag gtcaacggc tgatcgccca tccgctgccc	2220
ctgcgcctgg acggcatcac cggcccccggag gaggaaggcg ggcgcctgg aaccattctc	2280
ggctggccgc tggccgagcg caccgtggtg attccctcg gatccccac cgacccgcgc	2340
aacgtcgccg ggcggccatcg cccgtccagc atccccgaca aggaacaggc gatcagcgcc	2400
ctgcccggact acggccagcca gcccggcaaa cccggccgcgc aggacctgaa gtaa	2454

<210> 6
<211> 1233
<212> DNA
<213> Artificial Sequence
<220>
<223> pKL4 plasmid coding sequence

<400> 6
atgcatcacc atcaccatca cgatgtgaag ctggtgaaat ctggaggagg ctttagtgcag 60
cctggagggc ccctgaaaact ctccctgtgca acctctggat tcactttcag tgactattac 120
atgtatttggg ttccgccagac tccagagaag aggctggagt gggtcgcata cattagtaat 180
gatgatagtt ccggcgctta ttccagacact gtaaaaggccc ggttcaccat ctccagagac 240
aatgccagga acaccctcta cctgcaaatg agccgtctga agtctgagga cacagccata 300
tattcctgtg caagaggact ggccctgggg gcctggtttg cttactgggg ccaaggact 360
ctggtcactg tctctgcagc caaaacgaca cccccatctg tctatccact ggcccttgaa 420
tctgctgccc aaactaactc catggtgacc ctgggatgcc tggtaaggg ctatccct 480
gagccagtga cagtgacctg gaactctgga tccctgtcca gcggtgtgca cacccccc 540
gctgtcctgc agtctgaccc ctacactctg agcagctcag tgactgtccc ctccagcacc 600
tggcccaagcg agaccgtcac ctgcaacgtt gcccacccgg ccagcagcac caaggtggac 660
aagaaaaattg tgcccaggga ttgtggtgct aagccttgca tagctacaca agcttccggt 720
ggtgtggatc ctggaggtgg cgaaagcggaa ggtcccgagg tgacaggggg aatggcaagc 780
aagtgggatc agaagggtat ggacattgcc tatgaggagg cggccttagg ttacaaagag 840
ggtgtgttcc ctattggcggtatc aataacaag acggaaagtgt tctcggtcggt 900

ggtcacaaca	tgagattca	aaaggatcc	gccacactac	atggtagat	ctccacttg	960
gaaaactgtg	ggagattaga	ggccaaagtg	tacaaagata	ccactttgta	tacgacgctg	1020
tctccatgcg	acatgtgtac	aggtgccatc	atcatgtatg	gtattccacg	ctgtgttgc	1080
ggtgagaacg	ttaattcaa	aagtaaggc	gagaaatatt	tacaaactag	agtcacgag	1140
gttgtgttg	ttgacgatga	gaggtgtaaa	aagatcatga	aacaatttat	cgatgaaaga	1200
cctcaggatt	ggtttgaaga	tatttgttag	tag			1233

<210> 7
<211> 4871
<212> DNA
<213> Artificial Sequence
<220>
<223> pMC74 plasmid full sequence

<400> 7						
taatacga	cactataggg	agaccacaac	ggttccctc	tagaaataat	tttgtttaac	60
ttaagaagg	agatatacat	atggatgtga	agctgggta	atctggagga	ggcttagtgc	120
agcctggagg	gtccctgaaa	ctctcctgtg	caacctctgg	attcacttgc	agtgactatt	180
acatgtattt	ggttcgccag	actccagaga	agaggctgg	gtgggtcgca	tacattagta	240
atgatgatag	ttccggcgct	tattcagaca	ctgtaaaggg	ccggttcacc	atctccagag	300
acaatgccag	gaacaccctc	tacctgcaaa	tgagccgtct	gaagtctgag	gacacagcca	360
tatattcctg	tgcaagagga	ctggcctggg	gagcctgggt	tgcttactgg	ggccaaggga	420
ctctggcac	tgtctctgca	gccaaaacga	caccccccattc	tgtctatcca	ctggccccctg	480
gatctgctgc	ccaaactaac	tccatggtga	ccctggatg	cctggtaag	ggctatttcc	540
ctgagccagt	gacagtgacc	tggaactctg	gatccctgtc	cagcggtgtg	cacacattcc	600
cagctgtcct	gcagtcgtac	ctctacactc	tgagcagctc	agtgactgtc	ccctccagca	660
cctggccca	cgagaccgtc	acctgcaacg	ttgcccaccc	ggccagcagc	accaagggtgg	720
acaagaaaaat	tgtgccagg	gattgtggta	gttaagcctag	cataagtaca	aaagcttccg	780
gaggtcccga	gggcggcagc	ctggccgcgc	tgaccgcgc	ccaggcttgc	cacctgcccgc	840
tggagacttt	cacccgtcat	cgccagccgc	gccccctggga	acaactggag	cagtgcggct	900
atccggtgca	gcggctggtc	gccctctacc	tggccggcg	gctgtcgtgg	aaccaggctcg	960
accaggtgat	ccgcaacgccc	ctggccagcc	ccggcagcgg	cggcgacctg	ggcgaagcga	1020
tccgcgagca	gccggagcag	ccccgtctgg	ccctgaccct	ggccggccgc	gagagcggc	1080

gcttcgtccg gcagggcacc ggcaacgacg aggccggcgc ggccaacggc cccggcgaca 1140
gcggcgacgc cctgctggag cgcaactatc ccactggcgc ggagttcctc ggcgacggcg 1200
gacgtcag cttagcacc cgccgcacgc agaactggac ggtggagcgg ctgctccagg 1260
cgcaccccca actggaggag cgccgcatacg tgttcgtcgg ctaccacggc accttcctcg 1320
aagcggcgca aagcatcgta ttccggcgaaa tgccgcgcgc cagccaggac ctgcacgcga 1380
tctggcgccg tttctatatac gccggcgatc cggcgctggc ctacggctac gcccaggacc 1440
aggaacccga cgacgcggc cggatccgca acggtgccct gctgcgggtc tatgtgcgc 1500
gctcgagcct gccgggcttc taccgcacca gcctgaccct gcccgcgcg gaggcgccgg 1560
gcgaggctga acggctgatc ggccatccgc tgccgctgcg cctggacgac atcaccggcc 1620
ccgaggagga aggccggcgcc ctggagacca ttctcggctg gccgctggcc gagcgcaccc 1680
tggtgattcc ctccggatc cccaccgacc cgccgcacgt cggcgccgac ctgcaccgt 1740
ccagcatccc cgacaaggaa caggcgatca gcccgcgcg ggactacgac agccagcccc 1800
gcaaaccgcc gcgcgaggac ctgaagtaac tgccgcgacc gcccggctcc ctccgcagga 1860
gccggccttc tcggggcctg gccatacatc aggtttctt gatgccagcc caatcgaata 1920
tgaattcggc tgctaacaaa gcccggaaagg aagctgagtt ggctgcgtgcc accgctgagc 1980
ataactagc ataaccctt gggcctctaa acgggtcttg aggggtttt tgctgaaagg 2040
aggaactata tccggatcgg agatcaattc tggcgtaata gcgaagaggc ccgcaccgat 2100
cgcccttccc aacagttgcg tagcctgaat ggcgaatggg acgcgcctg tagccggcgca 2160
ttaagcgcgg cgggtgtggt ggttacgcgc acgtgacccg ctacacttgc cagccgccta 2220
gcgcggcgtc cttcgcttt ctcccttcc tttctcgcca ctttcggccgg cttccccgt 2280
caagctctaa atcggggct cccttaggg ttccgattta gtgcgttacg gcacctcgac 2340
ccccaaaaaac ttgatttaggg tggatgttca cgtatgggc catcgccctg atagacggtt 2400
tttcgcctt tgacgttggc gtccacgttc ttaatagtg gactcttgtt ccaaactggc 2460
acaacactca accctatctc ggtctattct tttgatttt aagggtttt gcccatttcg 2520
gcctatttgt taaaaaatga gctgatttaa caaaaattta acgcgaattt taacaaaata 2580
ttaacgttta caattcagg tggcactttt cggggaaatg tgccggaaac ccctatttgt 2640
ttatttttct aaatacatcc aaatatgtat ccgctcatga gacaataacc ctgataaatg 2700
cttcaataat attgaaaaag gaagagtatg agtattcaac attccgtgt cgcccttatt 2760
cccttttttg cggcattttg cttccctgtt tttgctcacc cagaaacgct ggtgaaagta 2820

aaagatgctg aagatcagtt gggcacga gtgggttaca tcgaactgga tctcaacagc 2880
ggttaagatcc ttgagagttt tcgccccgaa gaacgtttc caatgatgag cactttaaa 2940
gttctgctat gtggcgcggt attatcccgt attgacgcccggcaagagca actcggtcgc 3000
cgccatacact attctcagaa tgacttggtt gagtactcac cagtcacaga aaagcatctt 3060
acggatggca tgacagtaag agaattatgc agtgctgcca taagcatgag tgataaacact 3120
gcggccaact tacttctgac aacgatcgaa